<u>**REMARKS / ARGUMENTS**</u>

<u>Amendments to the Specification</u>

"[I]nformation contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter." Manual for Patent Examining Procedure (M.P.E.P.) Edition 8 Rev. 4 § 2163.06. Correcting obvious errors does not constitute the addition of new matter where one skilled in the art would not only recognize the existence of error in the specification but also the appropriate correction. *In re Odd*, 443 F.2d 1200 (CCPA 1971) (cited in the Manual for Patent Examining Procedure (M.P.E.P.) Edition 8 Rev. 4 § 2163.07(II).

The amendment to the paragraph starting at **page 27, line 3** (as filed) in the specification corrects an obvious typographical error. The phrase *"allocating a server is response to a resource request is illustrated"* does not make gramatical sense. In the context, the Applicant obviously intended *"allocating a server in response to a resource request is illustrated."*

The amendment to the paragraph starting at **page 28, line 6** (as filed) in the specification corrects an obvious typographical error. The phrase *"the one of more candidate resources"* does not make gramatical sense. In the context, the Applicant obviously intended *"the one or more candidate resources"* since this is phrase used in the sentence immediately following the error and 14 time overall in the specification and claims, whereas the phrase *"the one of more candidate resources"* is a one-off that does not appear anywhere else in the Application.

<u>Arguments Regarding Claim Rejections in the Last Office Action</u>

The following arguments are responsive to the Examiner's Office Action mailed on January 9, 2006. At the time the Examiner mailed the Office Action, **Claims 1-44** were cancelled and **Claims 45-67** were pending. **Claim 45** has been amended for consistency of language, but the Applicant believes it to be substantively unchanged. The remaining **Claims 45-67** are as previously presented. The Applicant respectfully requests reconsideration of the present application in view of the following arguments. For the

Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

Rejections based on 35 U.S.C. § 102(e)

The last Office Action rejected **Claims 45-47, 52-58** and **63-67** under 35 U.S.C. 102(e) as being anticipated by Daoud et al. (hereinafter Daoud)(US 2002/0087694 A1).

Regarding **Claim 45**, the Office Action states (page 2) "*Romero teaches....*" However, the quotation and citation that follow appear to be from Daoud. The Applicant assumes that Daoud is the reference that the Examiner intended to cite for the rejection of **Claim 45**. Daoud only discloses a hierarchy of 2 levels load balancers, not 3 levels as claimed by **Claim 45**. (*see* [0048] "*A possible hierarchical configuration could comprise a gatekeeping load balancer that directs transactions either to a load balancer monitoring a premium server pool or to a load balancer monitoring a standard server pool, and the individual load balancers can then select a server from within the respective server pool.*") Daoud does not disclose or suggest a possible third or more levels of hierarchy. Daoud discloses a load balancer for a group of servers, but not for a group of groups - *i.e.* a "super group", as claimed in **Claim 45**. The Applicant has made an amendment to **Claim 45**, exchanging the term "server group index" with the more general term "resource group index" to make the term consistent with the rest of **Claim 45** and the rest of the other claims. The Applicant believes the above reasoning applies to both the amended and the pre-amended version of **Claim 45**. The Applicant thus believes the rejection of **Claim 45** has been successfully traversed and believes that claim is in condition for allowance.

Regarding **Claim 46** and **Claim 47**, they are dependent on **Claim 45**. As the Applicant believes that the rejection of **Claim 45** has been successfully traversed and believes that claim is in condition for allowance, the Applicant asserts that **Claim 46** and **Claim 47** are also in condition for allowance.

Regarding **Claim 52**, it is dependent on **Claim 45**. As the Applicant believes that the rejection of **Claim 45** has been successfully traversed and believes that claim is in condition for allowance, the Applicant asserts that **Claim 52** is also in condition for allowance.

Regarding **Claim 53**, it is dependent on **Claim 45**. As the Applicant believes that the rejection of **Claim 45** has been successfully traversed and believes that claim is in condition for allowance, the Applicant asserts that **Claim 53** is also in condition for allowance. Furthermore, Daoud discloses that "indicators within a packet may be combined to indicate the requested level of service." [0027] Daoud gives as examples of such indicators: "*a time-stamp, an origination ID, an application ID, a user ID, a project ID, etc.*" However, Daoud does not disclose a destination IP, a destination port and a protocol corresponding to the data packet as claimed in **Claim 53**. To generalize, Daoud discloses using information about the origination of the data packet to make a load balancing decision, but does not disclose using information about the destination of the data packet. The Applicant concludes that Daoud does not disclose the limitations of **Claim 53** and thus **Claim 53** is in condition for allowance.

Regarding **Claim 54**, it is dependent on **Claim 45**. As the Applicant believes that the rejection of **Claim 45** has been successfully traversed and believes that claim is in condition for allowance, the Applicant asserts that **Claim 54** is also in condition for allowance. Furthermore, The applicant respectfully submits that Daoud does not disclose the limitations of **Claim 54**. Daod discloses a system that balances loads based only on information sent by the service user that reflects the service user's desires on quality of service. Daoud does not disclose any system that makes load balancing decision based on the history of service provided as claimed in **Claim 54**. The Applicant concludes that **Claim 54** is in condition for allowance.

Regarding **Claim 55**, it is dependent on **Claim 45**. As the Applicant believes that the rejection of **Claim 45** has been successfully traversed and believes that claim is in condition for allowance, the Applicant asserts that **Claim 55** is also in condition for allowance. Furthermore, Daoud discloses a hierarchy of load balancers (*see* [0048]), but Daoud does not disclose *a plurality of tables each accessed in sequence, an output of each table being an input to the next table in the sequence, the first sequential table of the plurality of tables being configured to receive the first resource group index and the last sequential table of the plurality of tables being configured to provide the at least one resource index*, as claimed in **Claim 55**. These limitations claimed in **Claim 55** are not inherent in a system that uses a hierarchy of load balancers. The limitations of **Claim 55**

may be present in a system comprising a hierarchy of load balancers where a data packet waits in a buffer while the system determines which server the packet will be sent to, after which, the system removes the packet from the buffer and sends it to that server. In contrast, the limitations of **Claim 55** are not necessary for a system consistent with the Daoud disclosure, such as a system comprising a hierarchy of load balancers where the load balancer at each level of the hierarchy only decides which load balancer on the next level the packet is to be sent to next, after which the system immediately sends the packet to that load balancer. At the last level in the hierarchy, the last load balancer sends the data packet to a server. Each load balancer in such a system may have a table that would point at the load balancer the data packet is to be sent to next, but the system of load balancers would not have a single hierarchical data structure, with each table pointing to the next table. Thus, Daoud by disclosing only a hierarchy of load balancers does not inherently disclose the limitations of **Claim 55** and the Applicant asserts that **Claim 55** is in condition for allowance.

Regarding **Claim 56**, the last Office Action characterized it as a method for allocating resources to service requests carried out by the system of **Claim 45**. As the Applicant believes that the rejection of **Claim 45** has been successfully traversed and believes that claim is in condition for allowance, the Applicant asserts that **Claim 56** is also in condition for allowance for the same reasons.

Regarding **Claim 57** and **Claim 58**, the last Office Action characterized them as methods for allocating resources to service requests carried out by the system of **Claim 46** and **Claim 47**. As the Applicant believes that the rejections of **Claim 46** and **Claim 47** have been successfully traversed and are in condition for allowance, the Applicant asserts that **Claim 57** and **Claim 58** are also in condition for allowance for the same reasons.

Regarding **Claim 63**, the last Office Action characterized it as a method for allocating resources to service requests carried out by the system of **Claim 52**. As the Applicant believes that the rejection of **Claim 52** has been successfully traversed and believes that claim is in condition for allowance, the Applicant asserts that **Claim 63** is also in condition for allowance for the same reasons.

Regarding **Claim 64**, the last Office Action characterized it as a method for allocating resources to service requests carried out by the system of **Claim 53**. As the

Applicant believes that the rejection of **Claim 53** has been successfully traversed and believes that claim is in condition for allowance, the Applicant asserts that **Claim 64** is also in condition for allowance for the same reasons.

Regarding **Claim 65**, the last Office Action characterized it as a method for allocating resources to service requests carried out by the system of **Claim 54**. As the Applicant believes that the rejection of **Claim 54** has been successfully traversed and believes that claim is in condition for allowance, the Applicant asserts that **Claim 64** is also in condition for allowance for the same reasons.

Regarding **Claim 66**, the last Office Action gives no reason for the rejection. Since **Claim 66** depends on **Claim 65**, and since the Applicant asserts that the rejection of **Claim 65** has been successfully traversed and believes that claim is in condition for allowance, the Applicant asserts that **Claim 66** is also in condition for allowance for the same reasons.

Regarding **Claim 67**, the last Office Action characterized it as a method for allocating resources to service requests carried out by the system of **Claim 55**. As the Applicant believes that the rejection of **Claim 55** has been successfully traversed and believes that claim is in condition for allowance, the Applicant asserts that **Claim 67** is also in condition for allowance for the same reasons.

Rejections based on 35 U.S.C. § 103(a)

Regarding **Claim 48**, the last Office Action finds that Daoud teaches the system of **Claim 45**, and also *all* the additional limitations of **Claim 48**. The Office Action then recites limitations of **Claim 48** that it says Daoud does not explicitly teach, but the limitations that the Office Action recites are limitations of **Claim 49**, not **Claim 48**. (e.g. *a second load balancer, the super group block further configured to generate at least one additional resource group index in response to the first super group index, the second load balancer...*). Thus, the Office Action failed to give a reason for rejecting **Claim 48** under §103(a). Since **Claim 48** depends on **Claim 45** and since the Applicant has believes that the rejection of **Claim 45** under 35 U.S.C. § 102(e) has been successfully traversed and believes that claim is in condition for allowance, the Applicant asserts that **Claim 48** is also in condition for allowance for the same reasons.

Regarding **Claim 49**, the last Office Action finds that Daoud teaches the system **Claim 45**, and also *all* the additional limitations of **Claim 48**. The Office Action then recites limitations of **Claim 49** (though it incorrectly states they are limitations of **Claim 48**) that it says Daoud does not explicitly teach (e.g. *a second load balancer, the super group block further configured to generate at least one additional resource group index in response to the first super group index, the second load balancer...*). The Office Action finds that these limitation were disclosed by Romero (*"There can also be a hierarchy of load balancers 130, wherein a first load balancer passes the transaction to one of several load balancers, which then route the transaction 110 within a server pool 200 or within a server 140 (i.e., to the partition 160)"*). The Applicant asserts that the limitations of **Claim 49** are not disclosed by Romero. Romero discloses a hierarchy of load balancers that pass the transaction from higher to lower load balancers, but such a hierarchy does not inherently require the structure claimed by **Claim 49**. A system consistant with the Romero disclosure can be made comprising a hierarchy of load balancers where the load balancer at each level of the hierarchy only decides which load balancer on the next level the packet is to be sent to next, then immediately sends the packet to that load balancer. At the last level in the hierarchy, the last load balancer sends the data packet to a server. Each load balancer would analyze the packet anew in determining where the packet is sent in the next level of the hierarchy, but such a system of load balancers would not have a load balancer in the middle of the hierarchy configured to respond to a index from the previous level, as claimed by **Claim 49**. Thus Romero discloses a hierarchy of load balancers, but the particular way to-structure a hierarchy of load balancers claimed in **Claim 49** is not disclosed. Thus the Applicant respectfully submits that the rejection to **Claim 49** is successfully traversed and **Claim 49** is in condition for allowance.

Regarding **Claim 50** and **Claim 51**, the last Office Action finds that Daoud teaches the system of **Claim 45, Claim 50** and **Claim 51**. **Claim 50** and **Claim 51** depend on **Claim 49**. Since the Application believes it has successfully traversed the § 103(a) rejection of **Claim 49**, the Applicant asserts that the rejections of **Claim 50** and **Claim 51** are also successfully traversed. Additionally, since the Applicant has believes that the rejection of **Claim 45** under 35 U.S.C. § 102(e) has been successfully traversed and believes that claim is in condition for allowance, the Applicant asserts that a rejection

of **Claim 50** and **Claim 51** under 35 U.S.C. § 102(e) by Doud would also be overcome for the same reasons the Applicant has presented to overcome the rejection of **Claim 45**. The Applicant asserts that **Claim 50** and **Claim 51** are in condition for allowance.

Regarding **Claim 59**, **Claim 60**, **Claim 61** and **Claim 62**, the last Office Action characterized them as claims to methods for allocating resources to service requests carried out by the systems of **Claim 48**, **Claim 49**, **Claim 50** and **Claim 51** respectively. The Office Action did not explicitly reject **Claim 48**, **Claim 49**, **Claim 50** and **Claim 51**, but instead stated that "claims 57 and 58 are rejected." The Applicant believes this was likely a typographical error and the Examiner intended to reject **Claim 48**, **Claim 49**, **Claim 50** and **Claim 51**. In that case, the Applicant believes that the rejections of **Claim 59**, **Claim 60**, **Claim 61** and **Claim 62** are overcome with the same reasoning the Applicant presented (above) for **Claim 48**, **Claim 49**, **Claim 50** and **Claim 51**. The Applicant thus asserts that **Claim 59**, **Claim 60**, **Claim 61** and **Claim 62** are in condition for allowance.
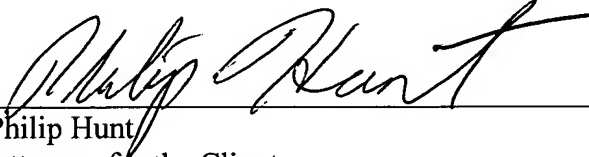
CONCLUSION

Applicant respectfully submits the present application is in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call Phil Hunt at (503) 439-6073. Please charge any shortages and credit any overcharges to our Deposit Account number 02-2666.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP

Date: 7/10/2006

Philip Hunt
Attorney for the Client
Reg. No. 58,044

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, CA 90025-1026
(503) 439-8778